SMAP Early Adopters, SMAP project contacts, and applied research topics. Many Early Adopters cross multiple applications.	
Early Adopter PI and institution SMAP Contact	**Applied Research Topic**
Weather and Climate Forecasting	
Stephane Bélair, Meteorological Research Division, Environment Canada (EC); SMAP Contact: **Stephane Bélair**	Assimilation and impact evaluation of observations from the SMAP mission in Environment Canada's Environmental Prediction Systems
Lars Isaksen and Patricia de Rosnay, European Centre for Medium-Range Weather Forecasts (ECMWF); SMAP Contact: **Patricia de Rosnay**	Monitoring SMAP soil moisture and brightness temperature at ECMWF
Xiwu Zhan, Michael Ek, John Simko and Weizhong Zheng, NOAA National Centers for Environmental Prediction (NCEP), NOAA National Environmental Satellite Data and Information Service (NOAA-NESDIS); SMAP Contact: **Randy Koster**	Transition of NASA SMAP research products to NOAA operational numerical weather and seasonal climate predictions and research hydrological forecasts
Michael Ek, Marouane Temimi, Xiwu Zhan and Weizhong Zheng, NOAA National Centers for Environmental Prediction (NCEP), NOAA National Environmental Satellite Data and Information Service (NOAA-NESDIS), City College of New York (CUNY); SMAP Contact: **Kyle McDonald**	Integration of SMAP freeze/thaw product line into the NOAA NCEP weather forecast models
John Galantowicz, Atmospheric and Environmental Research, Inc. (AER); SMAP Contact: **John Kimball**	Use of SMAP-derived inundation and soil moisture estimates in the quantification of biogenic greenhouse gas emissions
Jonathan Case, Clay Blankenship and Bradley Zavodsky, NASA Short-term Prediction Research and Transition (SPoRT) Center; SMAP Contact: **Molly Brown**	Data assimilation of SMAP observations, and impact on weather forecasts in a coupled simulation environment
Droughts and Wildfires	
Jim Reardon and Gary Curcio, US Forest Service (USFS); SMAP Contact: **Dara Entekhabi**	The use of SMAP soil moisture data to assess the wildfire potential of organic soils on the North Carolina Coastal Plain
Chris Funk, Amy McNally and James Verdin, USGS & UC Santa Barbara; SMAP Contact: **Molly Brown**	Incorporating soil moisture retrievals into the FEWS Land Data Assimilation System (FLDAS)
Brian Wardlow and Mark Svoboda, Center for Advanced Land Management Technologies (CALMIT), National Drought Mitigation Center (NDMC); SMAP Contact: **TBD**	Evaluation of SMAP soil moisture products for operational drought monitoring: potential impact on the U.S. Drought Monitor (USDM)
Kashif Rashid, UN World Food Programme; SMAP Contact: **Guy Schumann**	Application of a SMAP-based index for flood forecasting in data-poor regions
Floods and Landslides	
Rafael Ameller, StormCenter Communications, Inc.; SMAP Contact: **Randy Koster**	SMAP for enhanced decision making
Konstantine Georgakakos, Hydrologic Research Center; SMAP Contact: **Narendra Das**	Development of a strategy for the evaluation of the utility of SMAP products for the Global Flash Flood Guidance Program of the Hydrologic Research Center
Fiona Shaw, Willis, Global Analytics; SMAP Contact: **Robert Gurney**	A risk identification and analysis system for insurance; eQUIP suite of custom catastrophe models, risk rating tools and risk indices for insurance and reinsurance purposes
Agricultural Productivity	
Catherine Champagne, Agriculture and Agri-Food Canada (AAFC); SMAP Contact: **Stephane Bélair**	Soil moisture monitoring in Canada
Zhengwei Yang and Rick Mueller, USDA National Agricultural Statistical Service (NASS); SMAP Contact: **Wade Crow**	US National cropland soil moisture monitoring using SMAP
Amor Ines and Stephen Zebiak, International Research Institute for Climate and Society (IRI) Columbia University; SMAP Contact: **Narendra Das**	SMAP for crop forecasting and food security early warning applications
Jingfeng Wang, Rafael Bras, Aris Georgakakos and Husayn El Sharif, Georgia Institute of Technology (GT); SMAP Contact: **Dara Entekhabi**	Application of SMAP observations in modeling energy/water/carbon cycles and its impact on weather and climatic predictions
Curt Reynolds, USDA Foreign Agricultural Service (FAS); SMAP Contact: **Wade Crow and John Bolten**	Enhancing USDA's global crop production monitoring system using SMAP soil moisture products
Alejandro Flores, Biose State University; SMAP Contact: **TBD**	Data fusion and assimilation to improve applications of predictive ecohydrologic models in managed rangeland and forest ecosystems
Barbara S. Minsker, University of Illinois and sponsored by John Deere Inc.; SMAP Contact: **TBD**	Comprehensive, large-scale agriculture and hydrologic data synthesis
Human Health	
Hosni Ghedira, Masdar Institute, UAE; SMAP Contact**: Dara Entekhabi**	Estimating and mapping the extent of Saharan dust emissions using SMAP-derived soil moisture data.
James Kitson, Andrew Walker and Cameron Hamilton, Yorkshire Water, UK; SMAP Contact: **TBD**	Using SMAP L-2 soil moisture data for added value to the understanding of land management practices and its impact on water quality
Luigi Renzullo, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia; SMAP Contact: **Jeff Walker**	Preparing the Australian Water Resources Assessment (AWRA) system for the assimilation of SMAP data

Kyle McDonald and Don Pierson, City College of New York (CUNY) and CREST Institute, New York City Dept. of Environmental Protection; SMAP Contact: **Kyle McDonald**	Application of SMAP freeze/thaw and soil moisture products for supporting management of New York City's potable water supply
National Security	
John Eylander and Susan Frankenstein, U.S. Army Engineer Research and Development Center (ERDC) Cold Regions Research and Engineering Laboratory (CRREL); SMAP Contact: **Susan Moran**	U. S. Army ERDC SMAP adoption for USACE civil and military tactical support
Kyle McDonald, City College of New York (CUNY); SMAP Contact: **TBD**	Integration of SMAP datasets with the NRL environmental model for operational characterization of cryosphere processes across the north polar land-ocean domain
Georg Heygster, Institute of Environmental Physics, University of Bremen, Germany; SMAP Contact: **TBD**	SMAP-Ice: Use of SMAP observations for sea ice remote sensing
Gary McWilliams, George Mason, Li Li, Andrew Jones and Maria Stevens, Army Research Laboratory (ARL); U.S. Army Engineer Research and Development Center (ERDC) Geotechnical and Structures Laboratory (GSL); Naval Research Laboratory (NRL); and Colorado State University (CSU); SMAP Contact: **Susan Moran**	Exploitation of SMAP data for Army and Marine Corps mobility assessment
General	
Srini Sundaram, Agrisolum Limited, UK; SMAP Contact: **TBD**	Application of SMAP data products in Agrisolum - A bigdata social agritech platform
Thomas Harris and Dave Hulslander, Exelis Visual Information Solutions; SMAP Contact**: TBD**	Utilization of SMAP Products in ENVI, IDL and SARscape - Products L1 to L4